

Tomahawk Lake AIS Control Grant for 2016

Quarterly Report

Quarter No 2

July 1, 2016 - September 30, 2016

The following quarterly report documents the approved grant activities that were undertaken during the second quarter of the Tomahawk Lake AIS Control Grant for 2016. Subsequent quarterly reports will be forwarded as they are generated per the grant agreement.

The second quarter of the grant contained activities that were ongoing during the one-year grant. Activities included:

1. **The 2016 post-treatment AIS Aquatic Plant Point Intercept Survey** which took place in the last week of July, 2016. Per protocols outlined in the University of Wisconsin Aquatic Plant Management Guide, a Post-Treatment AIS Aquatic Plant Point Intercept Survey was performed in the last week of July.

The Point intercept survey was performed in the 130 sites initially surveyed in the 2016 pre-treatment point intercept aquatic plant survey taken in the fall of 2015. Rake density analysis on all species at each site was performed and data was entered into the aquatic Plant management guide workbook for use in comparison with the pre-treatment data set established in the previous fall. The comparison of the two data sets present a “before and after” picture of the effects of the chemical herbicide application upon the plant communities within each of these sites.

Upon entry of the survey data into the work book spreadsheet, a number of statistical calculations are triggered which allow for comparisons between the two data sets. This information is used to generate a statistical picture

of the effects of the herbicide treatment on both the target aquatic invasive species, as well as the native plant community. The results from these statistical analysis are published in the 2016 aquatic plant management report which has been submitted to the WDNR lakes manager in the Woodruff service Center.

2. **The second Tomahawk Lake Association “Sentinels” AIS Monitoring Survey** took place in the first two weeks of August. 16 teams of 2 to 4 people surveyed the littoral zones of the 16 geographical sectors which make up the Tomahawk Lake watershed. All Locations of Eurasian water milfoil which were identified in this second sentinels survey were recorded on GPS data collectors by the surveyors. At the end of the survey all 16 data collectors were submitted to the TLA mapping coordinator, who downloaded this data into a GIS ArcMap program which generated a watershed map with all locations noted. This map which updated the data set from the first Sentinel survey of the year taken in late June was shared with the TLA AIS coordinator and the TLA hydraulic conveyor system harvesting team for their use in locating EWM high density locations for treatments in the future.

3. **Continuation of Seasonal AIS Harvesting with the Hydraulic Conveyor System (DASH).** Ongoing harvesting of EWM continued through the second quarter Grant period at locations which met the harvesting criteria called for in the mechanical harvesting permit granted by the WDNR in the spring of 2016. Harvesting operations were highly successful during the 2016 season, and downtime due to mechanical failures or poor weather conditions were held to a minimum. While complete results are available in the 2016 Hydraulic Conveyor System Harvesting Report which was submitted to the WDNR lakes manager in the Woodruff service Center, it is important to know that 2016 represented a record year in drained weight harvested EWM from the Tomahawk Lake watershed.

4. Purple Loosestrife Bio Control Program cessation. In the first quarter of the 2016 grant period, the TLA AIS coordinator initiated a purple loosestrife bio control beetle rearing effort. Working with the assistance of the Oneida County AIS coordinator, and with beetle brood stock provided by the University of Wisconsin Madison, a beetle rearing facility was constructed, seed plants prepared to receive purple loosestrife beetle's, and final seating of those beetles onto the seed plants. Beetle reproduction was responding positively and placement was anticipated within the first two weeks of July. However, on Friday, July 1 a major electrical weather event swept across the Minocqua area with straight-line winds estimated at 80+ miles an hour. The northern Oneida County region lost several thousand mature trees to the storm and several million dollars of damage was done to area residents.

The TLA loosestrife beetle rearing facility was unfortunately destroyed during the course of this storm. None of the 10 loosestrife seed plants survived, and none of the beetle "brood stock" survived. The TLA AIS coordinator was injured in the clean-up period following the storm and with no availability of beetles and no one to place them, the purple loosestrife initiative for 2016 was terminated. It is the intention of TLA to reconstitute this effort in 2017 and the Association has submitted an application for a 2017 AIS control grant to help with this effort.

These are the activities which took place in the second quarter of the 2016 AIS control grant.

Edward Greedy

The Tomahawk Lake Association